

viscosity liquid of the primary container being capable of clogging the cannula upon entering therein, thereby preventing flow therethrough when the first and second ends of the cannula puncture the sealed primary and secondary containers.

36. (New) The system of claim 35, wherein the secondary container contains a calcium-coagulation activator.

37. (New) The system of claim 35, wherein the calcium-coagulation activator comprises at least one of calcium chloride, calcium fluoride, calcium carbonate, calcium gluconate, calcium fumarate, calcium pyruvate and combinations thereof.

38. (New) The system of claim 35, wherein the first and second ends are each covered by an elastomeric sleeve, the elastomeric sleeve being retractable when the first or second ends puncture the primary or secondary sealed containers.

39. (New) A method of separating red blood cells from plasma, the method comprising:

providing a sealed primary container having a first pressure, the primary container containing a separation medium and a high-viscosity liquid;

providing a sealed secondary container having a second pressure that is less than the first pressure;

providing a transfer device comprising a cannula having a first end and a second end, the first and second ends being capable of puncturing the sealed primary and secondary containers in order to provide fluid communication between the first and second containers;

drawing blood into the primary container;

centrifuging the primary container including the blood, separation medium and high-viscosity fluid such that the separation medium separates the red blood cells from the plasma;

puncturing the sealed primary and secondary containers with the transfer device, thereby allowing the plasma to flow through the cannula and into the secondary container; and clogging the cannula with the high-viscosity liquid.

40. (New) The method of claim 39, wherein the secondary container contains a calcium-coagulation activator.